

RESEARCH AND DEVELOPMENT STATISTICS PROGRAM

The Research and Development Statistics Program (RDS) is responsible for surveys, studies, reports, and analyses on the size and health of the U.S. research and development (R&D) enterprise and research infrastructure. RDS focuses on R&D funded and performed by industry, Government, universities and colleges, and other nonprofit organizations. Six surveys provide the core of information on these topics.

- ◆ The **Survey of Federal Funds for Research and Development** annually collects information on the composition, science and engineering (S&E) field, performers, and geographic distribution of all Federal R&D funding from the approximately 100 Federal agencies and subagencies that obligate funds for R&D.
- ◆ The **Survey of Federal Science & Engineering Support to Universities, Colleges, and Nonprofit Institutions** serves as the basis for an annual report to the President and Congress on information about Federal S&E obligations (for example, for R&D, S&E instructional facilities, fellowships, and training grants) to individual academic and non-profit institutions by the 15 Federal agencies that provide virtually all Federal academic R&D funding.
- ◆ The annual **Survey of Research & Development Expenditures at Universities and Colleges** collects data on R&D expenditures and research equipment, by funding source and S&E field, from a sample of about 700 institutions of higher education that grant S&E degrees or perform a minimum level of separately-budgeted R&D. Collection of information on R&D expenditures in non-S&E fields is planned for future surveys.
- ◆ The biennial **Survey of Scientific & Engineering Research Facilities at Universities and Colleges** collects data on the availability, condition, need, cost, and funding sources of research facilities from a sample of more than 300 research-performing universities and colleges. Special coverage is provided for biomedical research facilities and facilities at historically black colleges and universities. Collection of information on instructional facilities is planned for future surveys.
- ◆ The **Survey of Industrial Research and Development** annually collects information on the composition, funding sources, and location of industry's R&D expenditures and employment of scientists and engineers from a nationally

representative sample of about 25,000 companies (starting with the 1992 survey), including both manufacturing and nonmanufacturing companies.

- ◆ The **Survey of Science and Engineering Research and Development Funding and Performance by Nonprofit Organizations** is planned for 1998. The survey collects data on R&D expenditures by funding sources and S&E field and employment of scientists and engineers from a nationally representative sample of about 7,000 nonprofit organizations that fund and perform R&D. Comparable information was last surveyed for 1973.

RDS prepares composite estimates of the nation's total R&D effort and provides projections of these activities in advance of available survey totals. These statistics are reported in periodic and topical analytical publications:

- ◆ *National Patterns of R&D Resources* presents historical trend data and projections on the nation's overall R&D spending. It includes information on R&D expenditures by sources of funds, sectors of performance, and character of work. It also presents data on defense and nondefense R&D trends, state distribution of R&D performance, number of scientists and engineers employed in R&D, and international comparisons.
- ◆ *Federal R&D Funding by Budget Function* provides detailed data on the President's proposed Federal R&D budget authorizations, and historical R&D series, grouped within the Office of Management and Budget's functional categories such as defense, health, space, and energy. The data are collected from all Federal agencies that provide R&D information included in the President's annual Budget of the United States Government.

RDS produces several **specialized products** to address needs of the S&E community:

- ◆ The Program maintains the **Master Government List of Federally Funded Research and Development Centers** (FFRDCs) and associated information mandated in the Federal Acquisition Regulations. RDS also publishes more detailed information on the specific areas of individual FFRDC expertise in its **Annotated List of FFRDCs**.

- ◆ RDS produces *Academic Institutional Profiles*, which include information about S&E research and education for individual doctorate-granting institutions and for individual schools with S&E departments that grant a master's degree.
- ◆ RDS annually updates its *Science & Engineering State Profiles*, which provide data and rankings for States' (and the District of Columbia and Puerto Rico) S&E resource base derived from SRS surveys, and for broader economic variables from non-SRS sources.

Detailed Statistical Tables*Academic Research and Development Expenditures:*

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Federal Funds for Research and Development:

<i>FYs 1995, 1996, and 1997, volume 45</i>	97-327
<i>FYs 1994, 1995, and 1996, volume 44</i>	97-302
<i>FYs 1993, 1994, and 1995, volume 43</i>	95-334

Federal Funds for Research and Development: Detailed Historical Tables

<i>FYs 1951-97</i>	(web version only)
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<i>FYs 1956-95</i>	95-319

Federal Funds for Research and Development: Federal Obligations for Research by Agency and Detailed Field of Science and Engineering:

<i>FYs 1974-97</i>	(web version only)
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Federal Funds for Research and Development: Federal Obligations for Research to Universities and Colleges by Agency and Detailed Field of Science and Engineering:

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<i>FYs 1994-96</i>	95-342

Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions:

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Selected Data Tables (As of 1996, this type of report is no longer available.)*Selected Data on Academic Science and Engineering R&D Expenditures:*

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Federal R&D Funding by Budget Function:

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*Excerpts from Scientific and Engineering Research Facilities at Universities and Colleges: 1996—**Funding of Scientific and Engineering Research Facilities*

Capital Projects at Colleges and Universities - Paper Number 1 97-314

Deferred Construction and Repair/Renovation at Scientific

and Engineering Research Facilities - Paper Number 2 97-315

Scientific and Engineering Research Facilities at Historically

Black Colleges and Universities - Paper Number 3 97-316

Scientific and Engineering Research Facilities at

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Science and Engineering State Profiles: 1997 98-315

Science and Engineering State Profiles: Fall 1996 97-306

Data Briefs

“1996 U.S. Industrial R&D: Firms Continue to Increase Their Investment”	98-317
“Federal Obligations for Applied Research Keep Pace with Those for Basic Research”	98-309
“Federal Academic Science and Engineering Obligations Decreased Slightly in FY 1996”	98-308
“Six States Account for Half the Nation’s R&D”	98-306
“Academic R&D Expenditures Maintain Steady Growth in FY 1996”	98-303
“1995 U.S. Industrial R&D Rises, NSF Survey Statistics Expanded to Emphasize Role of Nonmanufacturing Industries”	97-332
“R&D Exceeds Expectations Again, Growing Faster than the U.S. Economy during the Last Three Years”	97-328
“President’s FY 1998 Budget Asks for Slightly Lower Inflation-Adjusted R&D Spending”	97-320
“Total Stock of Academic Research Instruments Tops \$6 Billion in 1993”	97-309
“Federal Basic Research Share Grows During a Period of Declining R&D”	97-308
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“Federal Funding for R&D and R&D Plant to Drop in FY 1996; Department of Defense Survey Data Expanded”	96-306
“Academic S&E Support from Federal Agencies Rose by 8 Percent in FY 1994”	96-305
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